

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW MEXICO**

UNITED STATES OF AMERICA,

Plaintiff,

vs.

No. CR-2006-1797 MV

ROBERT ABDUL BAINES ET AL.,

Defendants.

MEMORANDUM OPINION AND ORDER

This matter came before the court on Defendant's Motion for *Daubert* Hearing Regarding the Admissibility of Expert Testimony of Fingerprint Evidence [Doc. No. 99] filed February 27, 2007, and United States' Response to Defendant's Motion for *Daubert* Hearing [Doc. No. 103] filed March 13, 2007. On March 26, 2007, this court conducted a *Daubert* hearing on the motion. After having considered the motion, briefs, evidence and relevant law, and being otherwise fully informed, the court **DENIES** the motion to exclude expert testimony on fingerprint evidence. This Memorandum Opinion sets forth the bases for the court's decision.

I. BACKGROUND

On July 22, 2006, Defendant was stopped at the Interstate 25 Checkpoint in Dona Ana County with Co-Defendants Fuller, Campbell and Johnson. Defendant and his Co-defendants were traveling in tandem from Arizona to Pennsylvania in two vehicles. Pursuant to the stop and subsequent investigation, Border Patrol Agent Meza found three bundles of marijuana weighing approximately 50 pounds in the trunk of Fuller's car. One bundle was in a white laundry bag; the second was in a blue laundry bag; and the third was in a duffle bag. The duffle bag was also discovered to contain two loaded semi-automatic 9mm pistols. Both guns and the magazines

contained therein were all processed for possible latent fingerprints. One of the magazines was determined to have a latent impression of Defendant's left thumb. Testing on the other magazine was inconclusive. The government seeks to have a fingerprint expert testify at trial about the fingerprint evidence.

II. DEFENDANT'S ARGUMENT

Defendant argues fingerprint analysis does not satisfy the *Daubert* criteria. *See Daubert v. Merrell Dow Pharms.*, 509 U.S. 579, 113 S.Ct. 2786, 125 L.Ed.2d 469 (1993). He claims: a) there has been a complete absence of scientific testing in the fingerprint profession; b) there is no error-rate data; c) latent fingerprint examiners in the United States currently operate in the absence of any uniform objective standards; and d) the technical literature that exists in the fingerprint field has failed to meaningfully address any of the fundamental premises that underlie fingerprint identification. (Motion at 5-6.) However, Defendant acknowledges that "latent fingerprint examiners have been testifying in court as experts in this country for decades." (Motion at 4.) He further states that "[i]t can hardly be disputed that a consensus exists among the general public as well as the judiciary that latent fingerprint identifications are perfectly reliable." (Motion at 6.) However, he says "the pertinent inquiry for purposes of *Daubert* is whether a general consensus has been reached by a "relevant scientific community." (Motion at 6-7.) He claims "forensic science commentators, writing in the wake of *Daubert*, have recognized that latent fingerprint examiners are, in fact, susceptible to a *Daubert* challenge on grounds of reliability." (Motion at 4-5.) He also incorrectly says "[t]o date, there has not been any reported decisions in which fingerprint analysis has been put to the test of *Daubert*. . .". (Motion at 5.)

In support of his argument, Defendant cites no case law whatsoever that addresses the

reliability of fingerprint evidence or its acceptance as a scientific method. However, Defendant cites several articles and papers that appear to discuss fingerprint analysis, and in some cases, apparently question it. However, Defendant did not provide copies of the articles cited, nor did he submit any other supporting or corroborating evidence to the court. Moreover, at the conclusion of the hearing on this matter, counsel for Defendant stated:

I have no argument with regard to the methodology that was used in this case. I think my argument is that when it comes down to it, is that this is a very subjective area of forensic investigation, that there really is no measure of, or rate of error. It all comes down to the subjective interpretation of a particular examiner here.

(Hrg. Tr. at 132.) Counsel's statement contradicts his motion and shows that Defendant's argument goes to the weight of the evidence, not the methodology used; thus obviating the need for a *Daubert* hearing in the first place.

III. GOVERNMENT'S ARGUMENT

The government argues that fingerprint evidence is both relevant and reliable. The government further asserts that the testimony of a fingerprint expert is admissible under Fed. R. Evid. 702 because it will "assist the trier of fact to understand the evidence or to determine a fact in issue." (Response at 1.) The government notes that "the Tenth Circuit has not ruled directly on the reliability of fingerprint evidence, [but] it has noted in dicta that such evidence is reliable." (Response at 2.) The government cites *Williamson v. Ward*, 110 F.3d 1508 (10th Cir. 1997) in support of this assertion. In *Williamson*, the Tenth Circuit described fingerprint evidence as "conclusive." 110 F.3d at 1520 n.13. Additionally, the government cites *United States v. Ward*, 96 Fed.Appx. 615, *620 (10th Cir. 2004) which noted "Circuits that have addressed the admissibility of fingerprint evidence have determined it is scientifically reliable." 96 Fed.Appx. at *620 n.5. Furthermore, the Tenth

Circuit cited with approval the Fourth Circuit's decision in *United States v. Crisp*, 324 F.3d 261 (4th Cir. 2003). *Id.* In *Crisp*, the Fourth Circuit found "[w]hile the principals underlying fingerprint identification have not attained the status of scientific law, they nonetheless bear the imprimatur of a strong general acceptance, not only in the expert community, but in the court as well." 324 F.3d at 268.

Additionally, the government cites the Third Circuit decision in *United States v. Mitchell*, that explains in detail the reasons latent fingerprint evidence satisfies the *Daubert* test. 356 F.3d 215 (3d Cir. 2004). The *Mitchell* court conducted a five-day, eleven-witness *Daubert* hearing on the admissibility of latent fingerprint evidence, and concluded that the majority of the factors supported admission of such evidence under *Daubert*. *Id.*, see also *United States v. Abreu*, 406 F.3d 1304 (11th Cir. 2005) (holding fingerprint evidence satisfied *Daubert*); *United States v. Janis*, 387 F.3d 682 (8th Cir. 2004) (same); *United States v. Sherwood*, 98 F.3d 402 (9th Cir. 1996) (same).

Based on the Tenth Circuit's general position that fingerprint evidence is reliable, and the multiple other courts that have conducted more detailed analysis of the issue that have also found such evidence reliable, the government asserts this court should determine the fingerprint evidence is reliable under *Daubert* and admissible relevant evidence under Rule 702.

IV. ANALYSIS

Faced with a proffer of expert scientific testimony under Rule 702, the court must first determine whether the expert is proposing to testify to (1) scientific knowledge that (2) will assist the trier of fact to understand or determine a fact in issue. *Daubert*, 509 U.S. at 592-93. "This entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts

in issue.” *Id.* *Daubert* sets forth a non-exclusive checklist for trial courts to use in assessing the reliability of scientific expert testimony including:

1. whether the expert’s technique or theory can be or has been tested– that is, whether the theory can be challenged in some objective sense or whether it is instead a subjective conclusory approach that cannot reasonably be assessed for reliability;
2. whether the technique or theory has been subject to peer review and publication;
3. the known or potential rate of error of the technique or theory when applied;
4. the existence and maintenance of standards and controls; and
5. whether the technique or theory has been generally accepted in the scientific community.

Id. at 593-97. *Daubert* emphasized that these factors are neither exclusive nor dispositive. *Id.* at 588-91; *see also Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 141-42, 119 S.Ct. 1167, 143 L.Ed.2d 238 (1999) (stating no single factor is dispositive of the reliability of a particular expert’s testimony). Moreover, *Daubert* points out that the “focus, of course, must be solely on principles and methodology, not on the conclusions they generate.” 509 U.S. at 595. Once the principles and methods have been established, the court must determine whether they have been followed in the case before it. *Id.* at 592-93.

In this case, at the *Daubert* hearing the government presented the testimony of two expert witnesses, Stephen Meagher and Dan Fullerton. Mr. Meagher is a fingerprint specialist and has been employed by the Federal Bureau of Investigations for 35 years. Mr. Meagher testified at length about the principals and methodology underlying fingerprint evidence. Mr. Meagher discussed and explained the following with respect to fingerprint evidence: 1) the nature of fingerprints, latent

fingerprints and known prints; 2) fingerprint patterns and their subclassifications; 3) friction ridge skin and how it “results in unique and persistent ridge structure which can be used to personally identify an individual” (Hrg. Tr. at 12); and 4) level 1, 2 and 3 detail used to individualize fingerprints.

Mr. Meagher also responded to the specific factors identified in *Daubert* for assessing the reliability of scientific expert testimony. 509 U.S. at 593-97. First, he explained in considerable detail the scientific basis for fingerprint identification by identifying the two basic factors, uniqueness and persistence, that allow friction ridges to be used as a means of personal identification. Second, he discussed scientific studies that have tested the uniqueness and persistence of friction ridges. Third, he discussed the biological basis for the uniqueness and persistence of friction ridges, including an explanation of how twins, triplets and quadruplets have unique friction ridge arrangements as well as the effect of potential biological errors and malformations on an individual’s friction ridge pattern. Fourth, Mr. Meagher discussed the empirical data that supports the persistence of friction ridges going back over 100 years. Fifth, Mr. Meagher demonstrated the use of statistics and probability studies to support a finding of individuality and persistence in fingerprint evidence. Sixth, he explained and demonstrated how the AFIS fingerprint model is used by most law enforcement agencies throughout the United States that allows an individual to search large repositories of fingerprint evidence to find the most likely candidates that match a fingerprint search. He also identified studies that have used the AFIS technology to test the uniqueness of fingerprints. Furthermore, he explained that the AFIS technology does not take into account all of the information used by an examiner in order to effect an identification; and then explained how an aggregate of all three levels of identification must be in agreement to effect an identification. Seventh, Mr. Meagher explained the evidence to support the general acceptance of using friction ridge impressions as a

means of personal identification. Eighth, he explained the ridgeology formula and ACE-V methodology used to analyze and compare friction ridge patterns. Ninth, Mr. Meagher also explained and demonstrated how both quality and quantity of information in latent prints and known exemplars affect the identification process. Tenth, he discussed the error rate for friction ridge identification, explaining that there are two types of errors— methodological error and practitioner error. Mr. Meagher stated that the methodological error rate is zero in friction ridge analysis; while, the practitioner error rate depends on the individual examiner. Finally, he discussed how the method has been subject to peer review and publication as well as other generally accepted standards used by the latent print community for friction ridge examination, including: the American National Standards Institute, the National Institute of Technology (NIS), the ACE-V methodology and SWGFAST which stands for the scientific working group on friction ridge analysis study and technology.

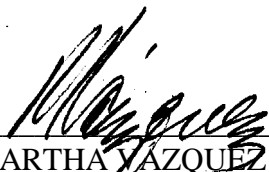
Next, the government offered the testimony of Dan Fullerton, a latent fingerprint examiner with 35 to 40 years of experience in fingerprint analysis. Mr. Fullerton examined the fingerprints at issue in this case. He explained in detail the methodology and process he used to examine the latent fingerprints taken from both ammunition magazines at issue, which is consistent with the methodology discussed by Mr. Meagher. Based upon his examination and analysis of the prints at issue, he determined that the latent print taken from Item N-14A was individualized as the #6 left thumb print of Defendant. He also explained that he was unable to individualize the latent print on the other ammunition magazine, Item N-2A. Mr. Fullerton also explained the statements and findings set forth in his notes (Hrg. Tr. Ex. G-41), and his Laboratory Report. (Hrg. Tr. Ex. G-42.) Finally, Mr. Fullerton testified that his findings were verified by his supervising examiner.

Based upon the evidence presented by Mr. Meagher, the court finds that the government has

met its burden and shown by a preponderance of the evidence that the reasoning and methodology underlying latent fingerprint evidence is scientifically valid and was properly applied by Mr. Fullerton to the facts at issue in this case. The court also considers persuasive the jurisprudence cited by the government in its response and noted above. The court finds the evidence is relevant and reliable and satisfies the requirements for the admissibility of expert testimony on the issue of fingerprints set forth in Rule 702. Consequently, the court will allow the government to admit at trial expert testimony regarding the fingerprint evidence at issue in this case. Finally, in response to Defendant's concerns about the subjective interpretation of the examiner in this case, the court notes that this concern does not go to the admissibility of the evidence, but its weight. Moreover, all scientific methodology is only as good as the person who uses it. As stated in *Daubert*, "[v]igorous cross-examination, presentation of contrary evidence and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence." 509 U.S. at 596 (citing *Rock v. Arkansas*, 483 U.S. 44, 61, 107 S.Ct. 2704, 97 L.Ed.2d 37 (1987)).

IT IS THEREFORE ORDERED THAT Defendant's motion to exclude expert testimony on fingerprint evidence is **DENIED**.

Dated this 9th day of April, 2007.


 MARTHA YÁÑEZ
 UNITED STATES DISTRICT JUDGE

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